II. AMENDMENTS TO THE CLAIMS

Claims 1-41 are cancelled.

42. (Newly Presented) A method of interactively designing a user interface comprising:

receiving a domain model, a user model, a task model, a device model, and a presentation elements library, wherein the domain model defines application requirements for which the user interface is to be used, wherein the user model defines user requirements of the users who are to interface with the user interface, wherein the task model defines task requirements of tasks to be performed between the user interface and the users, wherein the device model defines interaction delivery devices that are available to deliver the user interface, and wherein the presentation elements library contains the display objects used to present information to or acquire information from a user of the user interface being designed;

generating a set of presentations, wherein each presentation in the set of presentations comprises an interaction delivery device and a display object that meets the requirements of the interaction delivery device, wherein the interaction delivery device is selected from the set of interaction delivery devices in the device model that meets the user requirements defined by the user model and the task requirements defined by the task model, and wherein the display object is selected from the set of display objects in the presentation elements library that meets the task requirements defined by the task model and the application requirements defined by the domain model; and

displaying the set of presentations to a user interface designer.

43. (Newly Presented) The method of claim 42 further comprising, responsive to at least one input from the user interface designer, generating the user interface.

44. (Newly Presented) The method of claim 42 wherein generating a set of presentations is performed by a reasoning engine.

45. (Newly Presented) The method of claim 42 wherein generating a set of presentations comprises:

matching capabilities of the interactive delivery devices in the device model to task requirements defined in the task model and to user requirements defined in the user model; and

matching capabilities of display objects in the presentation elements library to task requirements defined in the task model and application requirements defined in the domain model.

46. (Newly Presented) The method of claim 42 wherein generating a set of presentations further comprises scoring each presentation according to the extent to which the presentation meets the application requirements defined in the domain model, the user requirements defined in the user model, and the task requirements defined in the task model.

47. (Newly Presented) The method of claim 46 further comprising sorting each presentation according to its score.

48. (Newly Presented) The method of claim 42 wherein displaying the set of presentations to a user interface designer further comprises displaying each presentation in a ranked list according to score.

49. (Newly Presented) The method of claim 42 wherein the domain model, the user model, the task model, and the device model are expressed in a common notation format.

50. (Newly Presented) The method of claim 49 wherein the common notation format adheres to the Resource Description Framework specification.

51. (Newly Presented) The method of claim 42 wherein each presentation is an XML file.

52. (Newly Presented) A method of interactively designing a user interface comprising:

creating a domain model, a user model, a task model, a device model, and a presentation elements library, wherein the domain model defines application

requirements for which the user interface is to be used, wherein the user model defines user requirements of the users who are to interface with the user interface, wherein the task model defines task requirements of tasks to be performed between the user interface and the users, wherein the device model defines interaction delivery devices that are available to deliver the user interface, and wherein the presentation elements library contains the display objects used to present information to or acquire information from a user of the user interface being designed;

storing the domain model, user model, task model, device model, and presentation elements library into computer readable media;

generating a set of presentations, wherein each presentation in the set of presentations comprises an interaction delivery device and a display object that meets the requirements of the interaction delivery device, wherein the interaction delivery device is selected from the set of interaction delivery devices in the device model that meets the user requirements defined by the user model and the task requirements defined by the task model, and wherein the display object is selected from the set of display objects in the presentation elements library that meets the task requirements defined by the task model and the application requirements defined by the domain model; and

displaying the set of presentations to a user interface designer.

53. (Newly Presented) The method of claim 52 further comprising, responsive to at least one input from the user interface designer, generating the user interface.

54. (Newly Presented) The method of claim 52 wherein generating a set of presentations is performed by a reasoning engine.

55. (Newly Presented) The method of claim 52 wherein generating a set of presentations comprises:

matching capabilities of the interactive delivery devices in the device model to task requirements defined in the task model and to user requirements defined in the user model; and

matching capabilities of display objects in the presentation elements library to task requirements defined in the task model and application requirements defined in the domain model.

56. (Newly Presented) The method of claim 52 wherein generating a set of presentations further comprises scoring each presentation according to the extent to which the presentation meets the application requirements defined in the domain model, the user requirements defined in the user model, and the task requirements defined in the task model.

57. (Newly Presented) The method of claim 56 further comprising sorting each presentation according to its score.

58. (Newly Presented) The method of claim 52 wherein displaying the set of presentations to a user interface designer further comprises displaying each presentation in a ranked list according to score.

59. (Newly Presented) The method of claim 52 wherein the domain model, the user model, the task model, and the device model are expressed in a common notation format.

60. (Newly Presented) The method of claim 59 wherein the common notation format adheres to the Resource Description Framework specification.

61. (Newly Presented) The method of claim 52 wherein each presentation is an XML file.

62. (Newly Presented) A method of interactively designing a user interface comprising:
storing a domain model into computer readable media, wherein the domain model defines application requirements for which the user interface is to be used;
storing a user model into computer readable media, wherein the user model defines user requirements of the users who are to interface with the user interface;
storing a task model into computer readable media, wherein the task model defines task requirements of tasks to be performed between the user interface and the users;

storing a device model into computer readable media, wherein the device model defines interaction delivery devices that are available to deliver the user interface;

storing a presentation elements library into computer readable media, wherein the presentation elements library contains the display objects used to present information to or acquire information from a user of the user interface being designed;

generating a set of presentations, wherein each presentation in the set of presentations comprises an interaction delivery device and a display object that meets the requirements of the interaction delivery device, wherein the interaction delivery device is selected from the set of interaction delivery devices in the device model that meets the user requirements defined by the user model and the task requirements defined by the task model, and wherein the display object is selected from the set of display objects in the presentation elements library that meets the task requirements defined by the task model and the application requirements defined by the domain model; and

displaying the set of presentations to a user interface designer.

63. (Newly Presented) The method of claim 62 further comprising, responsive to at least one input from the user interface designer, generating the user interface.

64. (Newly Presented) The method of claim 62 wherein generating a set of presentations is performed by a reasoning engine.

65. (Newly Presented) The method of claim 62 wherein generating a set of presentations comprises:

matching capabilities of the interactive delivery devices in the device model to task requirements defined in the task model and to user requirements defined in the user model; and

matching capabilities of display objects in the presentation elements library to task requirements defined in the task model and application requirements defined in the domain model.

66. (Newly Presented) The method of claim 62 wherein generating a set of presentations further comprises scoring each presentation according to the extent to which the presentation meets the application requirements defined in the domain model, the user requirements defined in the user model, and the task requirements defined in the task model.

67. (Newly Presented) The method of claim 66 further comprising sorting each presentation according to its score.

68. (Newly Presented) The method of claim 62 wherein displaying the set of presentations to a user interface designer further comprises displaying each presentation in a ranked list according to score.

69. (Newly Presented) The method of claim 62 wherein the domain model, the user model, the task model, and the device model are expressed in a common notation format.

70. (Newly Presented) The method of claim 69 wherein the common notation format adheres to the Resource Description Framework specification.

71. (Newly Presented) The method of claim 62 wherein each presentation is an XML file.

72. (Newly Presented) A computer readable media with instructions to cause a processor to perform the steps of:

receiving a domain model, a user model, a task model, a device model, and a presentation elements library, wherein the domain model defines application requirements for which the user interface is to be used, wherein the user model defines user requirements of the users who are to interface with the user interface, wherein the task model defines task requirements of tasks to be performed between the user interface and the users, wherein the device model defines interaction delivery devices that are available to deliver the user interface, and wherein the presentation elements library contains the display objects used to present information to or acquire information from a user of the user interface being designed;

generating a set of presentations, wherein each presentation in the set of presentations comprises an interaction delivery device and a display object that meets the requirements of the interaction delivery device, wherein the interaction delivery device is selected from the set of interaction delivery devices in the device model that meets the user requirements defined by the user model and the task requirements defined by the task model, and wherein the display object is selected from the set of display objects in the presentation elements library that meets the task requirements defined by the task model and the application requirements defined by the domain model; and

displaying the set of presentations to a user interface designer.

73. (Newly Presented) The computer readable media of claim 72 further comprising instructions to cause a processor to perform the step of, responsive to at least one input from the user interface designer, generating the user interface.

74. (Newly Presented) The computer readable media of claim 72 wherein the step of generating a set of presentations comprises:

matching capabilities of the interactive delivery devices in the device model to task requirements defined in the task model and to user requirements defined in the user model; and

matching capabilities of display objects in the presentation elements library to task requirements defined in the task model and application requirements defined in the domain model.

75. (Newly Presented) The computer readable media of claim 72 wherein the step of generating a set of presentations further comprises scoring each presentation according to the extent to which the presentation meets the application requirements defined in the domain model, the user requirements defined in the user model, and the task requirements defined in the task model.

76. (Newly Presented) The computer readable media of claim 75 wherein the step of generating a set of presentations further comprises sorting each presentation according to its score.

77. (Newly Presented) The computer readable media of claim 72 wherein the step of displaying the set of presentations to a user interface designer further comprises displaying each presentation in a ranked list according to score.

78. (Newly Presented) The computer readable media of claim 72 wherein the domain model, the user model, the task model, and the device model are expressed in a common notation format.

79. (Newly Presented) The computer readable media of claim 78 wherein the common notation format adheres to the Resource Description Framework specification.

80. (Newly Presented) The computer readable media of claim 72 wherein each presentation is an XML file.